THE Louis Berger Group, INC.

October 7, 2013

Kristen Switzer
Environmental Specialist
Division of Air Pollution Control
Ohio Environmental Protection Agency
Northeast District Office
2110 East Aurora Road
Twinsburg, Ohio 44087

RE: Air Permit Application – NON-CONFIDENTIAL VERSION
Proposed Ashtabula Tire Conversion Facility
Ashtabula, Ohio
Hand Delivered

Dear Ms. Switzer,

The Louis Berger Group, Inc. (LBG) has prepared this application on behalf of Ashtabula Tire Partners (ATP) for an Air Permit to Install and Operate for WEP's proposed Ashtabula Tire Conversion Facility located in Ashtabula, Ohio. The proposed pyrolysis facility will use waste tires as the raw material to generate carbon black and oil for sale, and fuel gas for internal, captive use.

Pyrolysis is defined as the degradation of carbon based materials through the use of an indirect, external source of heat, typically at temperatures of 750 to 1,650°F, in the absence, or almost complete absence of free oxygen. This process thermally decomposes and releases the volatile portions of the organic materials, resulting in synthetic gases (syngas) composed primarily of hydrogen (H2), carbon monoxide (CO), carbon dioxide (CO2) and methane (CH4). After the syngas is cleaned, it can be used in gas turbines, internal combustion engines or boilers to produce heat or generate electricity. Oil and char material that can be processed into carbon black are also by-products of this process.

The facility has been designed to minimize air emissions and employs emission controls at appropriate locations. The waste tire pyrolysis facility will include the following major processes as shown in the Process Flow Diagram included in Attachment 2:

- Tire delivery and shredding with removal of metal;
- Processing (pyrolysis) of ¾ inch shredded tires in four 50 tons/day continuous pyrolysis units;

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- Oil filtering, storage in four vertical, fixed roof storage tanks and offloading into tanker trucks ;
- Desulfurization of synthesis gas for fuel in the pyrolysis units and two gas fired turbines and,
- Carbon black finishing (pelletizing and bagging).

NSPS and NESHAP Applicability

The process that will be implemented at the facility is a unique form of manufacturing and it is noted that no NSPS (40 CFR Part 60) and no NESHAPS (40 CFR Part 61 or Part 63) apply to the pyrolysis process, the carbon black process or the material handling. 40 CFR 63 Subpart MMMMMM applies to area sources of 'Carbon Black Production' however the process used at the WEP facility will be distinct from the process covered by Subpart MMMMMM in numerous respects and therefore is not covered by Subpart MMMMMM.

'Carbon black production' is defined in Subpart YY [40 CFR 63.1103(f)(2)] as "the production of carbon black by either the furnace, thermal, acetylene decomposition, or lampblack process." And a 'carbon black production unit' is defined as "the equipment assembled and connected by hard-piping or duct work to process raw materials to manufacture, store, and transport a carbon black product..." Subpart MMMMMM specifically incorporates these definitions by reference and the preamble for Subpart MMMMMM describes in more detail each of the three processes covered by the definition of 'carbon black production'. WEP's "tire sublimation" process differs from the 'carbon black production' process included in Subpart MMMMMM and therefore is not subject to Subpart MMMMMM.

One reconditioned 1-MW syngas fired turbine will provide continuous power to the facility. A second reconditioned 1-MW syngas fired turbine will provide power during peaking hours. NSPS for Stationary Combustion Turbines at 40 CFR Part 60 Subpart KKKK replaces Subpart GG and is applicable to the two turbines that are proposed for this facility. The allowable emissions for NOx and SO_2 in the NSPS are 96 ppm at 15% oxygen and 0.060 lb SO_2/MMBtu respectively. The emissions from these turbines are expected to be 45 ppm at 15% oxygen and 0.00059 lb SO_2/MMBtu, below the NSPS allowable.

NESHAP for Stationary Combustion Turbines at 40 CFR Part 63 Subpart YYYY is not applicable to this facility since the facility is not a major source for HAPs (>10 tpy for one HAP and >25 tons for all HAPs). Additionally there is no NESHAP for stationary gas turbines in area sources.

Estimated Emissions

A summary of the estimated emissions is provided in the following table: